THE

LOUISVILLE MEDICAL NEWS:

A WEEKLY JOURNAL OF MEDICINE AND SURGERY.

H. A. COTTELL, M.D., Editor. JOHN P. MORTON & CO., Publishers.

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THE

LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNÂ."

SATURDAY, SEPTEMBER 20, 1884.

Original.

ABDOMINAL SURGERY.*

BY W. SYMINGTON BROWN, M. D.

Surgical gynecology has made great progress during the last ten years. I have just returned from a visit to Scotland's greatest surgeon, Dr. Thomas Keith, and will tell you, in a gossipy fashion, what I saw in Edinburgh last July, adding a few details from a "Report of Cases Treated in Ward XIX, Royal Infirmary," by his son, Dr. Skene Keith.

When I reached Glasgow last June, I wrote to Dr. Keith, requesting the privilege of being present at one of his operations. As it happened, I was too late to see two highly interesting cases, and I had to wait till July 9th, when I met the Doctor and was informed that a patient with a large uterine fibroid would be operated on next morning.

She was an unmarried lady, twenty-five years of age, and presented an appearance at least as large as that of a woman at full term. The patient had traveled a considerable distance, and was staying at one of those semi-private hotels so common in Edinburgh.

The operation was performed in a small bedroom, without elaborate Listerian precautions. No spray of any kind was used, but the sponges, cloths, instruments, operator's and assistant's hands, were dipped in a two-per-cent solution of carbolic acid. The patient was strapped to the table by a wide girth over the lower limbs, and each wrist tied to this girth with strips of cloth. This arrangement allows the minimum number of assistants, only three being present—one to administer the ether, one to hand instruments, etc., and one to assist Dr. Keith in tying arteries, keeping back the viscera, etc. Dr. Skene Keith filled the last position.

Sulphuric ether was administered through Clover's small inhaler, and although the operation lasted seventy-five minutes only one and a half ounces of ether were consumed, and the patient was completely anesthetized. The advantages of employing a suitable inhaler are, (1) saving of ether, and (2) avoidance of loading the atmosphere in the room with an irritating vapor. In our own Massachusetts General Hospital, where a bare sponge is used, the waste must be enormous, and I have seen the assistant's hands so benumbed that he could scarcely hold the sponge.

The fibroid tumor, uterus, ovaries, fallopian tubes, and broad ligaments were entirely removed, leaving only a small knuckle of cervix; the mass weighed about twenty-five pounds. No bad symptoms occurred during the operation. The pulse remained firm and regular; no stimulants were needed. Not more than three or four ounces of blood were lost.

Dr. Keith uses scissors freely, and restrains bleeding by means of numerous powerful locking forceps, ten inches long, of which ten or twelve were attached in this case. In another case, forty-nine of these instruments were applied during the operation. Minor hemorrhages were arrested as fast as they occurred by torsion or ligature. He uses an ingenious instrument called sinus forceps in ligating soft tissues near blood-vessels. A strong, soft, iron wire tightly constricted the base of the tumor (you could scarcely call it a pedicle), and the mass was rapidly severed with scissors. A simple clamp was then applied, the stump smeared with a plasma of glycerine and perchloride of iron, and the pelvic cavity thoroughly cleansed.

I was surprised at the number of stitches Dr. Keith puts in when closing the abdom-

*Read before the Gynecological Society of Boston, Sept. 11, 1884.

inal walls. The incision was about twelve inches long; he used at least forty stitches, the deep ones of fine Chinese silk and the superficial ones of horsehair. The deep stitches included the peritoneum. His son informed me that they have never been troubled with any subsequent hernia, although several of the patients have afterwards borne children. This fortunate result, he thinks, is due to the extra care taken in closing the abdominal wound.

The report I refer to was published in 1883, and embraces a period of three years. Only two small rooms have been set apart in the New Infirmary for the surgical treatment of ovarian diseases. Each contains two beds. With a single exception, no operations but those of ovariotomy and hysterectomy were performed. Ovariotomy was performed sixty-nine times. Hysterectomy, or removal of the uterus, was performed ten times, on account of very large or of bleeding fibroids. In these cases the ovaries were also removed, and these were in every instance enlarged and diseased. The uterus was also twice successfully removed by the vagina. The ovaries and tubes were taken away twice. A tubo-interstitial pregnancy at full term was prevented from doing any harm by being removed by abdominal section.

"Of the sixty-nine ovarian cases, 21.73 per cent were free from adhesions, while 78 per cent were more or less firmly attached. The cautery was used to sever the pedicle fifty-five times. The extra-peritoneal method was used in nine out of the ten cases of hysterectomy."

Only four deaths occurred among the ovariotomy patients, and the hysterectomy cases *all* recovered. A truly marvelous success, when we consider that the patients were treated in a public hospital, and that the latter were operations of the most severe kind, the tumors varying from five to forty-two pounds.

One of the unsolved problems is, What is the secret of Dr. Keith's success, compared with our best American operators? Climate, and a more stolid physical constitution of the patients have been cited to account for the difference. I am satisfied that these circumstances, though favorable, do not constitute the chief reason. Nicety, cleanliness, experience, and delicacy of manipulation, no doubt, have a good deal to do with it, and these Dr. Keith carries out to a degree as nearly perfect as human nature seems capable of attaining; but, after all, the grand secret of his marvelous success depends mainly on personal magnetism—the almost unlimited confidence reposed in him by his patients. And this remark is as true of the wealthiest as of the poorest women. "He saved my daughter's life when she was almost dead," said an old gentleman to me, with heartfelt enthusiasm, "and nobody else could have done it." Cast-iron philosophers may call this feeling fanaticism, but call it what you will, it serves a good purpose. And it is true that Dr. Keith deserves all the confidence reposed in him. He was an experienced surgeon before he was an ovariotomist—a pupil of the great Syme, who had good reason to be proud of his pupil, and always spoke of him in the highest terms.

STONEHAM, MASS.

Miscellany.

"PEPSAU."—Henry Beroth, of Chicago, states in the Pharmaceutical Record that he has a specimen of "pepsin" prepared in 1853 by an old gentleman who lived in the neighborhood of Jamestown, Chautauqua County, N. Y. He lived a secluded life, and was called "Crazy Owen" by his neighbors, who had heard him boast of a discovery of rare medicinal properties, and from which he expected to make "lots of money." After his death, which occurred soon after his product was ready for market, many packages containing the pepsin were found, while some of it lay in barrels or in heaps upon the floor of his house. The secret of its preparation probably died with the manufacturer. On testing the preparation Mr. Beroth finds that it is insoluble in acidulated water, with no solvent power over albumen, and that it does not coagulate milk; its age, however, being thirty-one years, may account for the inertness.

The very characteristic circular surrounding the bottle reads as follows:

"PEPSAU."

"For the cure of Dyspepsia, Jaundice, Liver Complaint, together with all diseases arising from a disorganization of the stomach. This, I believe, is the Gastric Juices of the Stomach of the Ox, producing the Gastric Juice required by man to digest his food. Prepared by Eben Owen; by no other, I believe, in this world.

"Directions for Using.—Take a small half teaspoonful, fifteen minutes before eating, in a half gill of cold water. My advice is, to eat light suppers.

"Prices for Pepsau, by the gross or more, eighty cents per bottle; retail, one dollar a bottle. This is got up under prayer and will do good, I believe.
"April 16, 1853. EBEN OWEN."

THE WM. S. MERRELL CHEMICAL CO., of Cincinnati, have adopted, as staple sizes for supplying the trade with their green drug fluid extracts, both pound and four-ounce bottles. By means of this arrangement the retail druggist or physician may readily obtain these preparations in "original packages," fresh from the manufacturer, and so protect himself against any possible danger of substitution. It is the custom with many practicing physicians to apprise the dispensing chemist of their preference for some particular preparation by writing its manufacturer's name upon the prescription.

Dr. Thad. Reamy, the eminent gynecologist, advocates this practice in justification of which he says:

In my estimation a physician violates no code, either of ethics or morals, in demanding of his druggist that which he knows to be reliable, instead of leaving to the latter's judgment what preparations he shall or shall not use.

Upon the same question, Otto A. Wall, M. D., Ph. G., of St. Louis, writes in the Pharmaceutical Record, of Sept. 10, 1884:

We must admit that there is a difference, and often a great difference, between the various preparations sold under the same name—that some are almost worthless, others very active.

The physician may have become accustomed to the use of a certain preparation, say aconite. He knows what a certain dose of that particular preparation may reasonably be expected to do, and he does not know what action others may have. They may be weaker or stronger, it does not matter to him. He knows what he is about when he specifies a certain dose of that particular preparation, and it is no imputation of incompetency or dishonesty to any one when he specifies it. He simply tries to go sure and take no chances, and to substitute other preparations is dishonesty when we can obtain the one specified; and it is even a question if it would not be better and more honest to decline to fill the prescription rather than substitute without the consent of the physician or patient.

PLEURO-PNEUMONIA IN WESTERN CATTLE.—The Illinois State Veterinary Surgeon, on a recent tour of inspection, found a number of cases of this disease among the blooded stock upon several farms in Central Illinois. The cattle were condemned, the farms quarantined, and the Governor promptly issued a proclamation in which were legally authorized effective measures for the stamping out of the disease. A serious feature of the inspection was the finding in Peoria of some eight or nine horses afflicted with glanders. The diseased animals were certain sorry plugs owned by the expressmen, no cases being found among the upper-tendom of the equine population.

Acting upon the above and evidences of pleuro-pneumonia in other localities, the chief inspector of the Canadian Cattle Quarantine has recommended that the Dominion Government prohibit the importation of cattle from the United States into Canada for breeding purposes.

OLEOMARGARINE.—The New York Medical Journal says: Agents of the Assistant Dairy Commissioner are said to be engaged in obtaining evidence against dealers in this article. It is reported that a large number of cases will be brought into court as soon as the proper evidence can be had, and that already several summonses have been issued. It will be remembered that, according to the law passed April 24, 1884, the penalty for selling oleomargarine is a fine of from $100 to $500, and imprisonment for from six months to a year.

WHY HIS MANNER CHANGED.—The following sociological sketch is drawn by the Arkansas Traveler: Billings met Dr. Squint, "Hallo, my friend," exclaimed the doctor, "I am so glad to see you. You reporters are always on the go. You are the best reporter in Arkansaw. Say, I am going to have a little gathering of friends at my house to-morrow night; and my wife, who is a great admirer of you, by the way, sends you a special invitation. Let's have a bottle of wine. Say, there, waiter, bring us a bottle of Piper Heidsieck." "I suppose you have heard, doctor, that I am no longer connected with the Daily Boom." "No." "Yes, I have retired from the newspaper business. When do you say you want me to come around?" "O, any time," replied the doctor, with an evident change of manner. "Say, waiter, never mind the wine. Bring us two beers."

"ABSINTHE is becoming the popular drink," said a down-town saloon-keeper yesterday, "notwithstanding the fact that it is as dangerous as opium. It is generally taken after a night's spree. At first it is taken in small quantities in a mixed drink, but the quantity is increased until the drinker takes it plain. It has a wonderful effect in bracing a drunken man up, and it acts some-

what like opium, but when the habit is once acquired it becomes the master o the man. *The Sun.*

THE NATURE OF GUM.—Dr. Beijerinck, a Dutch scientist, has recently published the results of his investigations on the nature of the gum which collects on the branches of certain trees, especially those bearing stone fruits; such as the cherry, peach, plum, and others. He finds that it is due to a disease of the tree, and that it can be readily reproduced in sound trees by inoculating them with a piece of the gum. If the gum be heated or boiled for a long time, it loses the property of reproducing the disease. The gum is found to contain a highly organized fungus of the Coryneum species, which is the organism producing the disease, similar to the bacteria in men and animals; and the gum which forms on the tree is not the cause of the disease, but is an abnormal product resulting from the action of the Coryneum fungus on the vital forces of the tree. Experiments were made upon healthy cherry trees by making a slight incision in the bark, and placing a bit of gum under it; and in every case where the gum contained any of the fungus a diseased action was set up in the tree, gum was formed in abundance, and more or less of the surrounding bark and wood was killed.

The first symptom is a spot of bright red about the inoculated spot, and from thence it spreads further into the tissues, in time causing their death. The disease also spreads to points where no Coryneum fungus can be found; and Dr. Beijerinck believes that the Coryneum produces a sort of ferment, which penetrates to tissues of the wood, changing the cells and their contents, and even the Coryneum itself, into gum.

These investigations will be of great value to fruit-growers, and may be of service to them in protecting their trees from a troublesome disease. As it has been proved to be so highly contagious, great care should be taken to remove all affected twigs and lumps of gum, and burn them, and also to see that no pieces of gum are washed by rain into fresh cuts on sound branches. On the other hand, as the valuable gums, like arabic and tragacanth, are produced in the same manner, it may be quite possible to largely increase the product by a simple system of cultivation by inoculation.—*Popular Science News.*

THE President of the Central Board of Health, Adelaide, South Australia, has issued a circular urging upon householders the advisability of boiling milk before using it, as a precaution against typhoid fever.—*Australasian Medical Gazette.*

[If this rule were rigidly followed in all cities, especially during the late summer and autumn months, the ravages of this disease would certainly be much diminished.]

LOVERS of salad need have no fear that the supply of "olive" oil will diminish to any alarming extent. According to The Druggman, there are now eighty-five mills in operation in the South for the manufacture of cotton-seed oil, and during the past season about 500,000 tons of the seed were crushed, giving a product of over 250,000 barrels of that convenient adulterant. —*Weekly Drug News.*

A FLIGHT FROM IMPENDING EVIL.—A young physician of South Australia, while awaiting the results of an official inquiry as to the nature, causes, and results of an outbreak of ophthalmia among some industrial school children who were at the time under his charge, took refuge in a lethal dose of chloroform.

TYLER GRAFTON, M. D., a distinguished physician and professor, of Georgetown, D. C., died at his residence in that place on the 26th of August. He is descended from a family of Tylers who came from England and settled in Maryland in 1660. He died at the age of seventy-three.

THE American Association for the Advancement of Science held its annual session in Philadelphia last week. The meeting was largely attended, and distinguished by the presence of a number of foreign visitors. As usual, much valuable scientific matter was presented in the sections.

A LITHOGRAPHED MEDICAL JOURNAL.—The most unique medical journal at present published is probably *Le Journal Médical Quotidien.* It is published daily in Paris. All the matter is written out in excellent script and this is then lithographed. The journal is therefore autographic.—*Medical Times.*

LAWSON TAIT says that any woman who has an ovarian tumor removed in her own house is a fool for her pains.

The Louisville Medical News.

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H. A. COTTELL, M. D., - - - - - - - Editor.

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CHOLERA AND THE COMMA-BACILLUS.

The comma-bacilli will not live in liquids devoid of nutritive material, nor do they flourish when placed in very dilute nutritive solutions.

Dr. Koch's experiments upon this point have as yet failed to settle definitely the limit of dilution compatible with their development, but are sufficient to prove "that comma-bacilli require a certain concentration of nutritive substance in which to grow."

It was further seen, in the culture experiments with gelatin and meat broths, that a trace of acid in the medium stunted the growth of the bacilli, while a decided acid reaction arrested it completely. But this can not be said of all acids, for while the lactic acid or acid phosphate of the gelatin or broth checks their growth, the malic acid which gives on the cut surface of the potato a decided reaction, does not hinder their free proliferation.

The influence of antiseptic drugs in checking the growth of the bacilli was tested. Upon this point the author observes that the prevention of development does not imply disinfection, for here the growth of the microbe is hindered only, while in disinfection it should be killed outright.

Davaine regarded iodine as highly poisonous to bacteria because he was able to kill the bacilli of anthrax suspended in pure water by the addition of a very small quantity of this drug; "but in practice the conditions are quite the reverse. We never have to stop the development of infectious matters in pure water, but in the alkaline contents of the intestines or in the blood or in the juices of the tissues, and the iodine does not remain free in these, but combines at once with the alkalies." In the author's experiment iodine water, one part in 4,000 (near the limit of its solubility), was added to a specimen of meat broth which was just suitable as a nutritive liquid, and it was found that one cubic centimeter of this solution when mixed with ten cubic centimeters of the broth did not hinder the growth of the bacilli in the least. Iodine, therefore, to prevent the development of the bacilli, must be exhibited in a much larger proportional amount, and since a quantity great enough to be effective can not be given to a cholera patient, further experiments with this drug are unnecessary. Experimenting with other substances it was found that alcohol, in the strength of one part to ten; sulphate of iron, 1 : 50; alum, 1 : 100; camphor, 1 : 300; carbolic acid, 1 : 400; oil of peppermint, 1 : 2,000; sulphate of copper, 1 : 2,500; quinine, 1 : 5,000, and corrosive sublimate, 1 : 100,000, were competent to arrest their development. Common salt in the proportion of two per cent was without effect.

In considering the possible utility of these drugs in the treatment of cholera, the author concludes that alcohol can not be given in quantity sufficient to kill the bacilli; that ferrous sulphate is without specific action upon the microbes, hindering their growth only by throwing out of the culture-fluid the peptones and albuminates, by which they are nourished, at the same time generating an acid. Indeed, it is not improbable that an attempt to disinfect a cess-pool known to contain the comma-bacilli by means of this drug would defeat the purpose intended,

since the addition of a quantity of ferrous sulphate sufficient to produce an acid reaction in the contents of the pool is necessary to arrest putrefaction; and by this means the bacteria are merely checked in development, not destroyed. If, however, the comma-bacilli were left to grow with the bacteria of putrefaction, the author believes that in consequence of conditions already described* the former would soon die out. It is possible that any drug which arrests the development of the microbes without killing them may be a means of preserving infectious matters. Of camphor the author expected a stronger effect; its influence upon the comma-bacillus is very slight. Carbolic acid is of about the same influence with this as with other bacteria. Sulphate of copper has a very powerful effect; but to be of use in the treatment of cholera it would have to be given in quantities so large that the lives of the microbe and the patient would be equally endangered by its exhibition. Quinine makes a favorable showing, and corrosive sublimate stands at the head of the list here as in all other tests of its power as a germicide. Clinical evidence of the utility of the two last-named drugs in the prophylaxis and treatment of cholera is not wanting.

In striking contrast with the doubtful efficacy of drugs as destroyers of the comma-bacilli is the fact that desiccation will destroy them. Upon this point the author's experiments are full and conclusive. In no case, except with a large mass of bacilli (for instance, the pulpy scrapings of a potato-culture field), was he able to keep the microbes alive after a drying in the air of three hours' duration, and in the exceptional case they died in twenty-four hours.

In this respect the comma-bacillus differs from other pathogenic bacteria, which, with infectious matters wherein the presence of a specific microbe has not as yet been demonstrated, may be kept in a dried state for years, preserving their power of infection. From this it would seem that the comma-bacillus is incapable of passing into a permanent state. Further experiments with the view of establishing a permanent state were made by keeping the choleraic dejecta upon damp linen, and in damp earth, in gelatine cultures, blood-serum, milk, marsh-water, and on potatoes, but invariably without evidence of a permanent state.

In this striking fact the author finds further evidence in support of his opinion that the cholera microbe is not a genuine bacillus, but closely allied to the spirillum, no permanent state of which has as yet been demonstrated. He further maintains that the absence of a permanent state perfectly coincides with the experience of the etiology of cholera.

The hygienic significance of this statement is indeed sublime, since, if it be not found under further study that the microbe has a spore in which it may find a permanent state, and it be proved that the disease is kept alive in India, its home, by transmission from person to person through the medium of water contaminated by dejecta from ever-recurring cases, the deduction means nothing less than the early annihilation of the most destructive of epidemic diseases.

*Louisville Medical News, vol. xviii, p. 170.

THE Weekly Drug News calls attention to a recent article by Darton, giving some very interesting results of experiments made by him on the volatile nitrogenous organic matter which Remsen, and, later, Marsh, have shown to exist in many waters. Darton concentrated the distillate from various well-waters, and tested the residue by injecting it under the skin of rabbits, producing in most cases either death or very serious disturbance in the animals. These marked effects were obtained from waters which had been shown to contain much volatile nitrogenous matter.

DR. ROBERT E. ROGERS, late Professor of Chemistry in the Jefferson Medical College, died suddenly on the 6th inst. He was born in Baltimore, Md., in 1814.

Bibliography.

Post-Nasal Catarrh and Diseases of the Nose Causing Deafness. By EDWARD WOAKES, M. D., Senior Aural Surgeon and Lecturer on Diseases of the Ear, London Hospital; Senior Surgeon Hospital for Diseases of Throat, London. Illustrated with wood engravings. P. Blakiston, Sons & Co., Philadelphia.

We have read this monograph with profit; for while it treats of diseases which are usually considered as belonging to the special domain of the aural surgeon, it contains much that is interesting and instructive to the general practitioner. The author's hypothesis of the mechanism of taking cold is new, original, and based upon strict scientific principles. His suggestions in regard to the prevention of these disorders in the catarrhally predisposed are invaluable.

Surgically considered, the work is clear and concise in detail, very plain and explicit in symptomatology, diagnosis, and treatment.

The approach of the fall and winter months, with an increase in the percentage of catarrhal disorders, renders the publication of this work particularly seasonable. It is deserving of a large sale. W. I. C.

James R. Osgood & Co., of Boston, publish in neat and convenient form the address of Robert P. Porter to the Arkwright Club, of New England, on "Protection and Free Trade To-day." Mr. Porter graphically presents what voters in both political parties want to know, the facts showing how free trade and protection work at home and abroad, in the field and the workshop. He shows how agriculture, commerce, and manufacturing in the United States, Great Britain, Germany, and Holland have been affected by these two economic policies. Mr. Porter's work will be appreciated by business men, farmers, and artisans who have no time to read a volume on the subject, but who want a clear exposition of the condition of labor here and in European countries. He takes decided protective ground, but makes a fair use of the official figures, which are, at times, handled with dramatic effect. Few are better equipped by training to discuss this question than Mr. Porter. Price, ten cents.

A Compend of Organic and Medical Chemistry, including Urinary Analysis and the Examination of Water and Food. By Henry Leffman, M. D., D. D. S., Professor of Chemistry and Metallurgy in the Pennsylvania College of Dental Surgery, and of Clinical Chemistry and Hygiene in the Philadelphia Polyclinic. Philadelphia: P. Blakiston, Son & Co. 1884.

Text-book of Medical Jurisprudence and Toxicology. By John J. Reese, M. D., Professor of Medical Jurisprudence and Toxicology in the University of Pennsylvania, Vice-President of the Medical Jurisprudence Society of Philadelphia. Physician to St. Joseph's Hospital, etc. Philadelphia: P. Blakiston, Son & Co. 1884.

Correspondence.

PARIS LETTER.

[FROM OUR SPECIAL CORRESPONDENT.]

The etiology of tabes dorsalis, or, as it is also termed, locomotor ataxy, has been frequently referred to in the Louisville Medical News and other medical journals, but the subject having been recently discussed at the different learned societies of Paris, I thought it would not be superfluous to bring it again before your readers. At the "Societe de Therapeutique," M. Labbe observed that according to his experience the proportion of syphilitic patients suffering from tabes was considerable. M. Dally stated that of one hundred men, eighty at least were syphilitic. M. Dejardin-Beaumetz considered that the proportion of locomotor ataxy of syphilitic origin as given by certain authors is greatly exaggerated. He had on several occasions met with ataxic patients who had never been affected with syphilis. M. Martineau thought that syphilis was much more frequent than is generally supposed. The number of patients treated at the Lourcine Hospital (venereal hospital for females) is increasing every year. For 1882, there were two thousand eight hundred admissions. If the number of syphilitic females who are homeless and go about communicating the disease to five or six men every evening be considered, the number of the latter must be great indeed. M. Martineau thought, however, that syphilitic ataxy must be distinguished from simple tabes dorsalis in view of the treatment. For in the former case the ataxic symptoms are accompanied by characteristic signs of syphilis, and it is only in these cases that benefit may be expected from the specific treatment.

According to a paper by Professor Erb,

of Heidelberg, on the subject, and which has been reproduced in "*La France Medicale*, of one hundred and ten ataxic patients nine had no syphilis. For another group, he found ninety-one or one hundred, in which there were indubitable symptoms of syphilis; of the ninety-one, sixty-two had secondaries, and twenty-nine had chancre without any marked secondary symptoms. The following table indicates the time that elapsed between the development of tabes and the syphilitic infection:

Between 1 and 5 years	13 cases.
Between 6 and 10 years	31 cases.
Between 11 and 15 years	25 cases.
Between 16 and 20 years	15 cases.
Between 21 and 25 years	5 cases.
Between 25 and 30 years	1 case.
Uncertain	1 case.

Moreover, the author collected in a report all men who, having passed the age of twenty-five, had had syphilis. Of one thousand two hundred patients suffering from different affections, 77.25 per cent were free, 22.75 per cent had been affected with the venereal disease. For, laying aside all the doubtful cases, of one hundred infected patients, there were sixty-two ataxic and ten only presented distinct symptoms of syphilis without manifesting any other characters of tabes. As to the objection that morbid anatomy does not exactly represent the syphilitic origin of ataxy, Professor Erb contests the possibility of distinguishing at the outset with the microscope that which is not syphilitic. Professor Erb concludes his paper with the report of the following which is interesting, not only as regards tabes, but it affords a remarkable example of the tardy development of syphilis. The patient, having had chancre and bubo, presented eight years afterward the symptoms of tabes, and in the course of the twentieth year syphilitic manifestations appeared simultaneously on the skin and in the testicles and joints.

Apropos of tabes, I may here refer to a clinical lecture recently delivered by Professor Fournier, at the St. Louis Hospital, in which he described the affection as being polymorphous, the outset of which is most variable in its manifestations. He also considers that tabes is a disease of the spinal marrow, of the brain, and of the peripheric nerves, and that the term tabes should be substituted for locomotor ataxy, as ataxic movements may be found wanting for a long series of years, and it may be entirely absent during the whole course of the affection.

I have before me the report of the Principal of the Madras Medical College for the official year ending June 30, 1884, on which occasion prizes were distributed to the most deserving students, and several able addresses delivered. Although the Madras Medical College is not within my sphere, yet I thought that the addresses, though coming from the far East, would nevertheless interest the readers of the NEWS. I can, however, but give the substance of one or two of the principal. Dr. Dymott, Professor of Hygiene at the college, made some interesting remarks on marriage from a hygienic point of view. Referring to the influence of heredity in the transmission of certain diseases from parent to offspring, he said that this consideration should form an important element in the question of marriage. Dr. Dymott, after citing the old saying, "like father, like son," went on to say, "that the child often unmistakably resembles, both in moral and physical nature, his immediate parents. A peculiarity in a child can generally be traced back to some member of the family, remote or otherwise. Virtues, vices, strength, infirmity, are all more or less hereditary. It is a well-known fact, that consumption and gout run in families. It is also a fact, though perhaps not so generally known, that diseases of the mind—such as insanity, mania for drink, and so on, are handed down as family heirlooms. The origin of disease and vice has never been explained on scientific grounds. Probably most diseases can not be generated *de novo*. But for our present purpose it is sufficient to know that we have good grounds for reasoning that a child will inherit the physique and character of his progenitors. It does not necessarily follow that a son must be like his father; he may resemble his grandfather or take after his aunt. A drunkard may have a most abstemious daughter, but her children are liable to become drunkards or suffer from nervous diseases, such as epilepsy. When we look around and see the number of diseased children, and realize the horrid fact that such diseases are often inherited from the parents; when we see some drunken fellow-creature, a curse to himself and to society, and remember that, perhaps, that upright and steady man, his father, is to blame, in that he willfully or unconsciously married into a family where there was a weakness for drink; when we bear these things in mind we realize the immense importance of discreet marriages.

Every man should consider well before he marries, before he curses the world with generations of descendants for whose physical and moral frailties he will be responsible. If every one thought carefully on this subject, there would probably be fewer marriages. But this would be a blessing in every way, because, by means of a few but select marriages, the race of man would steadily improve.' This was certainly sound advice, but, it is feared, it will not be followed out by the great majority of mankind.

Sir Charles A. Turner, member of the Madras Council, and who presided over the meeting, made some appropriate remarks, and expressed himself to the following effect: "A general education enlarged one's mind and one's views, whereas, it was not so when only a particular subject was studied; the danger in this consisted in men not having large views. He had heard it said, that if one wanted good advice he ought not to go to specialists. If a specialist made gout a study, to every body who went to him he would say, 'You are suffering from gout.' In like manner, a specialist in liver would say, 'You are suffering from liver disease;' and a specialist who did not know what the patient was suffering from, would say, 'Neuralgia.' General education gave one a far wider view to compare and discriminate facts. In the medical profession, society required men who were more than specialists."

Cholera is still hovering about the South of France, and, so far as Marseilles and Toulon are concerned, the disease seems to be slowly but steadily dying out. Indeed, the same may be said of all the other places infected, and it is to be hoped that although the subsidence of the epidemic is but slow, yet that it will soon be complete.

SEPTEMBER 4, 1884.

Editor Louisville Medical News:

Have you or your readers ever observed any thing like the following?

In the month of July, 1884, Mrs. Rudocker, a bright, healthy white multipara, was delivered of a son without medical assistance. The labor was easy, natural, not prolonged. The nurse, while dressing the baby, discovered an irregular oval blister on the right side of its back. Yesterday the child was examined by Dr. West and myself. We found the blister situated one inch to the right of the first dorsal vertebra. It was an inch and a half in diameter, and contained a teaspoonful of liquid. The mother said that it had shriveled considerably since the birth of the child. There was no tenderness in its vicinity. The baby is quiet, hearty, and growing fast. It is free from other blemishes. L. CHASE, M. D.

IRVING, KANSAS, September 10, 1884.

Editor Louisville Medical News:

Allow me to report a case of prolonged gestation. Mrs. B. H., aged eighteen years, white primipara, ceased to menstruate on April 15, 1883. She felt fetal movements on September 15, 1883, and was delivered March 9, 1884, of a well-developed female child.

The patient was suffering from general anasarca at the time of delivery, which I believe had much to do with a laceration of the perineum accompanying the labor.

J. F. O'BARR, M. D.

LEDBETTER, TEXAS.

Selections.

VACCINATION FOR RABIES.—The following extracts are from the address of Pasteur before the International Medical Congress of 1884 (Med. Times): If the problem of rabies is to-day no longer insoluble, it is to these last-named methods that we owe this advance. Thus we have proved that the virus of rabies always develops itself in the nervous system, in the brain, the spinal cord, the nerves, and the salivary glands, and never simultaneously invades every part. It may for example fix itself in the spinal cord, and then attack the brain; or one may find it in one or more parts of the brain and not in others.

If one kills an animal, when the disease is at its height, it is often difficult to find the virus of rabies at any given point in the brain or spinal cord, but we have fortunately discovered that in every case in which death occurs as a natural result of the development of the disease, the uppermost portion of the spinal cord, which forms the point of transition between the cord and brain, and which one calls *the bulb*, is invariably the seat of the poison. When an animal dies of the rabies (and we know that the disease invariably ends in death), it is ab-

solutely certain that one will be able to obtain from the animal's *bulb* rabies-virus, which will produce the disease by inoculation on the surface of the brain in the arachnoid cavity after previous trephining.

If you take any street-dog you please and inoculate rabies in this manner by trephining, using as inoculating-material a portion of the bulb of an animal which has died of the disease, you will invariably convey rabies. The dogs to which the disease has been communicated in this manner are to be counted by hundreds. The method has never failed. The same operation has been performed on hundreds of guinea-pigs and on a yet greater number of rabbits, without a single failure.

These two remarkable results, the invariable presence of the virus in the bulb of animals dead of the disease, and the certainty that one can communicate rabies by inoculation in the arachnoid cavity are axioms firmly established by experiment and are of extreme importance. Thanks to the careful application and the so to speak daily employment of these criteria we were able to proceed with certainty in a study of such difficulty. But however solid this experimental basis may be, it is not in itself able to show us the way to a vaccination-method against rabies. In the present position of science to presuppose the discovery of a means of preventing infectious disease by vaccination—(1) one must have at one's disposal a virus which can exist in different degrees of virulence, the weakest of which may serve as a vaccine; (2) one must have discovered a method of producing these varying degrees of virulence. Hitherto science has known only one kind of rabies, that which occurs in dogs. All hydrophobia, in dogs, men, horses, cattle, wolves, foxes, etc., comes originally from the bite of a mad dog. *Rabies never arises spontaneously, either in the dog or any other animal.*

None of the instances on record of rabies occurring spontaneously are really authentic; I will add that in making this assertion I do not ignore the fact that there must have been a *first* case of rabies. To come forward with this kind of objection, when it is a question of solving the inquiry which engages us, helps no one but touches a problem which even now is still inscrutable —the very problem of life. It is like answering one who should maintain that an ovum always originates from an ovum, but nevertheless that the first ovum must have originated spontaneously. Science, which knows itself, sees that it benefits nobody to argue about the origin of things; it sees that such origin for the moment at least lies beyond its province.

If then we wish to determine the intensity of the virus from the length of the incubation period, it is unavoidably necessary to have recourse to inoculation by trephining, which is absolutely certain in its effects, and to employ larger quantities than such as would be necessary simply to produce rabies. When we operate in this way, irregularities in the length of incubation with the same virus will show a tendency to entirely disappear, because we always obtain the maximum of effect which the virus can produce; that maximum corresponding to the minimum duration of incubation.

Thus we have at length obtained a method which has enabled us to inquire into the possible existence of varying degrees of virulence, and to mutually compare them. The only secrets in this method, I repeat, are to inoculate by trephining, and to use a quantity of virus, which, although very weak, is more than sufficient to produce rabies in and by itself. This method eliminates the causes which might interfere with the duration of the incubation period, and makes it dependent exclusively on the activity of the virus, the comparative strength of which varies according to the minimum duration of incubation, which is determined by its effect.

The first application of this method was in connection with the study of rabies, and expressly in connection with attempts to discover if rabies is always one and the same, only with such differences as the varying nature of different kinds of dogs might produce. Let us then take wandering mad dogs at any season you please in the same year, or in different years, and belonging to the most different varieties. Let us in each case isolate the bulb, and, with the material obtained from it, inoculate by trephining from one to two rabbits, using two drops of the fluid obtained by macerating the bulb in two or three times its bulk of sterilized liquid; all proper cleanliness being observed. Let the inoculation be performed with the help of a Pravaz' syringe, somewhat bent at the end, introducing it through the dura mater into the arachnoid space. The following will be observed: In all the rabbits, no matter what mad dog was used to inoculate them

from, the incubation period will fall almost without exception between the twelfth and fifteenth days—you will never meet with an incubation period of eleven, ten, nine, or eight days; though you may sometimes meet with periods of several weeks or several months.

Rabies thus clearly enough possesses one poison only; its modifications, which however are very limited, depend simply on the known difference in the susceptibility of various kinds of dogs. But we shall now see a very marked change in the virulence of rabies-virus.

Guinea-pigs most rapidly attain the maximum virulence peculiar to them. In these animals the incubation period, which varies and is irregular at the beginning of successive transmissions, quickly attains a definite duration of five days. Seven or eight transmissions from guinea-pig to guinea-pig bring us to the maximum virulence. Moreover, both in guinea-pigs and rabbits, one observes according to the origin of the virus variations in the number of transmissions required to obtain the maximum virulence. If we transmit this maximum degree in rabbits and guinea-pigs to dogs, we obtain a virus which far surpasses in virulence that of the rabies which is commonly met with.

But I hasten to say, that whatever may be the usefulness of the discovery which I have just described, there exist and can be produced different kinds of rabies—all of which are more violent and kill more rapidly than the rabies which occurs in dogs. Scientific men overlook nothing which can be discovered in the field of science; but many whom the very thought of rabies strikes with fear look for something more than scientific curiosities. How much greater interest would man have in becoming acquainted with a rabies-virus which has been attenuated in its virulence! One then might cherish a hope of obtaining a vaccine from the rabies-virus, such as we have obtained in fowl-cholera, splenic fever, and even acute septicemia. Unfortunately the methods of procedure which were used in regard to these poisons proved themselves inapplicable in dealing with the virus of rabies. It therefore became necessary to try new and independent methods, for instance, cultivation of the rabies-virus in glass.

Jenner was the first to propound the idea that the poison which used to be called "grease" in horses, but which we now more accurately describe as "horse-pox," must be attenuated in its poisonous activity, if I may use the expression, by being transmitted through cows, before it could be introduced without danger into the system of man. This induced us to think it might be possible to attenuate the rabies-virus by passing it through the bodies of certain animals. Many attempts were made, but in the majority of the experiments on animals, the poison increased in virulence, just as in rabbits and guinea-pigs; fortunately this was not so in the case of monkeys.

On December the 6th, 1883, the bulb of a dog, which was known to be mad from the fact that a child which it had bitten had died of hydrophobia, was used to inoculate a monkey by trephining. The monkey was attacked with rabies eleven days later; from the first monkey the virus was transmitted to a second one, which was also attacked with rabies after eleven days' interval. In a third monkey rabies declared itself after an interval of twenty-three days, and so on. With the bulb of each of these monkeys two rabbits were inoculated by trephining. The rabbits which were inoculated from the first monkey were seized with rabies after intervals of thirteen and sixteen days respectively; those inoculated from the second monkey after fourteen and twenty days; those from the third after twenty-six and thirty days; those from the fourth after twenty-eight days, in each case; those from the fifth after twenty-seven days; and those from the sixth after thirty days.

So it is impossible to doubt that by transmission from monkey to monkey, and from the different monkeys to rabbits, the strength of the poison is weakened in the latter just as it is weakened in the dog. A dog which was inoculated with the bulb of the fifth monkey had an incubation period of not less than fifty-eight days, although inoculation was performed by trephining. Other experiments of the same nature, which were performed on a series of monkeys, led to results of a like character. We are thus in possession of a method which enables us to attenuate the virulence of rabies. Successive transmissions from monkey to monkey produce a virus which, on being transmitted to rabbits, communicates rabies after an incubation period, the length of which gradually increases. If, on the other hand, one passes on from these rabbits to successively inoculate fresh rabbits, the rabies comes under the law of increasing virulence on transmission from rabbit to rabbit, of which

I have already spoken. The application of these facts yields a method of vaccinating dogs as a protection against rabies. We take as a starting point one of the rabbits which have been inoculated from monkeys to such a sufficient degree that hypodermic or intravenous injection does not cause death. The succeeding preventive inoculations are performed with the virus-containing bulbs of the rabbits which have been the subjects of successive transmissions of infection from rabbit to rabbit, proceeding from the first infected.

In our experiments we have as a rule employed inoculation with virus from rabbits which have died after an incubation period of four weeks, but three or four times we have renewed our preventive inoculation from the bulbs of rabbits which have been inoculated from the rabbit which served as our point of departure.

A NEW ANTIPYRETIC.—Dr. Paul Guttman has lately introduced to the Medical Society of Berlin a new alkaloid, a derivative of quinoline, which bears a striking resemblance to quinine, while being more antipyretic than the latter. This medicament, which has been called *antipyrine* by Professor Filehne, has been obtained by Professor Knorr in the laboratory by way of synthesis. Antipyrine presents itself under the form of a white crystalline powder, very soluble in water, rather tasteless, easily tolerated by the stomach, especially when taken with wine or aromatics.

According to Professor Filehne this substance, exhibited in doses of two grams every hour till six grams are taken, is said to give constant antithermal results, even when the fever is very high. The antipyretic action lasts from seven to nine hours, sometimes very much longer, and the pulse becomes less frequent. May has tried this new remedy in the hospital of Cologne in the treatment of typhoid fever, and is enthusiastic in its praises. In his practice it has proved superior to quinine. Rank expresses himself similarly at the result of fifty observations in the hospital at Stuttgart. Guttman's trials are, however, the most numerous, and they seem to have been the most thorough. His cases, reports of which he has made to the Society, number one hundred and twenty. Twelve of these were cases of typhoid fever, eight of pneumonia, three of scarlet fever, four of intermittent fever, etc. All these affections were complicated by a high fever. Given in the doses before mentioned (ʒss per hour for three doses) antipyrine was observed always to cause a marked fall in the temperature, which lasted five or six hours, and even longer. In the first hour which follows the administration of the medicine the temperature falls half a degree, and the decline goes on increasing during the second hour, and attains its maximum during the third. As the temperature lowers perspiration appears. No secondary unpleasant effects have been noticed, unless occasional vomiting be excepted. The medicament is very soluble in warm water, a half gram of the latter dissolving one gram of the alkaloid. In this form it may be administered hypodermically, and so introduced it exercises a speedy, safe, and efficient action. The only febrile disease in which antipyrine seemed to be without effect was intermittent fever.

When given in antifebrile doses this medicine has always been found to be free from the inconveniences which attend sulphate of quinine in large doses, such as headache and intoxication. It would seem from Dr. Guttman's experience to be of about half the strength of quinine, that is, to get the full antipyretic effect which you would derive from two grams of quinine you must give four grams of the other.

The cost of antipyrine is about two thirds of that of quinine. Dr. Guttman has expectations that, now that it can be produced synthetically from relatively inexpensive materials, there will soon be a considerable reduction in its price.

In the discussion which followed the reading of Dr. Guttman's paper, Dr. Tillmans related his experience with the new medicament in the Charity Hospital. In general his observations confirm those of Guttman. He finds that patients enfeebled by chronic affections (suppurations, tuberculosis, etc.) are very susceptible to the action of antipyrine, even in small doses. Antipyrine is, on the whole, admirably supported. It may be given for months together without the least harm resulting. Tillmans has, in fact, given it uninterruptedly for months to tuberculous patients, and has kept the temperature within very nearly the normal bounds.

In pneumonia it is necessary to give large doses, for otherwise you can not control the temperature. In very bad cases of this disease Tillmans has brought down the febrile heat from 40.1° C. to 37.8° C. in six hours, by giving during this time seven

grams of antipyrine, and this reduction of temperature has lasted twelve hours.

In one case of typhoid fever Tillmans gave antipyrine from the beginning to the end of the malady, and kept the temperature almost within the normal limits.

Guttman has invariably found, when giving antipyrine, that when the fever again rises after the effect of the medicine passes off, the elevation of temperature is not attended with a chill, as is the case when kairine is given. The same fact has been confirmed by Falkenshein.

A trial of the medicine at the Boston City Hospital during the last three months confirms, as far as experiments go, these observations and conclusions. Three successive hourly doses of thirty grains cause not infrequently a fall in temperature of four to six degrees, the subsequent maximum not being attained for eight to twelve hours, and then being less than the initial temperature. No inconveniences have been experienced.

On the whole, the profession seems to have in antipyrine a febrifuge of no little promise. It is to be regretted, however, that its originator should not have felt it unworthy of German science to cover the discovery with a patent.—*Boston Medical and Surgical Journal.*

GASTROSTOMY, ESOPHAGOSTOMY, INTERNAL ESOPHAGOTOMY, COMBINED ESOPHAGOTOMY, ESOPHAGECTOMY, AND RETROGRADE DIVULSION IN THE TREATMENT OF STRICTURE OF THE ESOPHAGUS.—The frequency of carcinomatous obstruction of the esophagus in middle life, and of circatricial or fibrous structure, particularly in subjects of tender years, has led Dr. Samuel W. Gross to collect, in the July number of the American Journal of the Medical Sciences, the somewhat numerous and scattered instances of the various operations which have been practiced for their relief, and elaborately study and compare their relative value and disadvantages. To fulfill this object intelligently, he has considered separately carcinomatous and simple strictures.

The four operations applicable to carcinomatous stricture are gastrostomy, esophagostomy, internal esophagotomy, and esophagectomy, of which the first three are palliative, and the last curative.

From the consideration of one hundred and ninety-four cases of operative procedure, Dr. Gross finds that gastrostomy has proved to be the simplest, most rational, and safest of the four operations for the relief of carcinomatous stricture. Increasing experience demonstrates that the results are growing better and better, which can not be said of esophagostomy; and there is every reason to believe that the successes will become more numerous if it is resorted to as soon as the diagnosis of the disease has been made, and before the powers of the patient are materially impaired. The few deaths do not constitute an argument against its adoption, while "every recovery is a clear gain; and a fatal issue is simply the natural termination forestalled."

The operations which have been practiced for cicatricial stricture are gastrostomy, esophagostomy, internal esophagotomy, combined esophagotomy, and retrograde divulsion. Dilatation, Dr. Gross holds, is merely a palliative remedy, and sufficient time has not yet elapsed to test the value of divulsion through an opening in the stomach. Combined esophagotomy for strictures near the cardia is only applicable to children, and may prove of value in strictures impassible by instruments introduced through the mouth. Internal esophagotomy, if performed at all should be reserved for comparatively recent and short strictures, and esophagostomy is only applicable where the incision can be made below the obstruction. Gastrostomy he holds is the best and safest operation for simple stricture of the esophagus.

From the great difficulty of managing cicatricial stricture in children by dilatation, which is due partly to the struggles of the subjects, and partly to the disinclination of the parents to distress the child, Dr. Gross holds that dilatation should be resorted to only when the inflammation has subsided, and the denuded surface is in a granulating condition. When the constriction is of some standing, and all efforts at dilatation prove fruitless, gastrostomy will prove to be the safest and most beneficial operation for prolonging life.

Dr. Gross gives elaborate statistics, based on two hundred and seventy-one cases, in regard to operative interference for obstruction of the esophagus.

UNILATERAL SWELLING OF HYSTERICAL HEMIPLEGIA.—Dr. S. Weir Mitchell records in the July number of the American Journal of the Medical Sciences three cases of hysteria, in which there was unilateral increase in bulk at or near the menstrual period, and also at other seasons, after emo-

tional excitement, and he has been unable to find elsewhere any narration of similar cases. Whatever conclusions we may reach as to the immediate cause of the unilateral differences in size, which Dr. Mitchell has here described, it is at least clear that they are under the influences of the nervous system, and vary with the causes which also increase or lessen the analgesia, or give rise to chronic spasm. Beyond this Dr. Mitchell can as yet hardly go. Most probably, he thinks, it will be found that in many unilateral hysteric palsies a like phenomena exists, and has merely escaped attention because of being the least prominent in a group of symptoms. At all events, it adds another to the large group of resemblances which so closely relate organic to hysteric hemipalsy.

VACCINATION OF SCHOOL CHILDREN.—At the regular quarterly meeting of the Illinois State Board of Health, held in the city of Springfield, July 2 and 3, 1884, the Secretary, in his report to the Board, made the following comments and suggestions:

With regard to further action concerning smallpox, in view of the probability of its epidemic spread from abroad, as shown by its increasing prevalence in London and elsewhere and its frequent introduction into the State from neighboring States, I would suggest that it is desirable to call the attention of sanitary authorities and others to these facts and to the experience of the last few months, which shows that when the disease is introduced into a community where vaccination and revaccination were not thoroughly carried out during the recent epidemic there is still danger of serious trouble. It is also important that county superintendents, school boards, and others interested, should have their attention again directed to the fact that the *School Vaccination Order of the Board is permanent and continuous*, and that its thorough enforcement is expected so as to prevent any accumulation of unprotected or imperfectly protected scholars from term to term. . . .

In view of the foregoing considerations the board adopted the following resolution:

Resolved, That the increasing prevalence of smallpox in London and elsewhere, indicating a probable renewal of the epidemic tendency, and its frequent introduction into Illinois from neighboring States within the past few months, make it desirable that vaccinal protection be secured as fully as possible in every portion of the State; and to this end the Secretary is hereby authorized to call the attention of sanitary authorities and others to the subject, and to take the necessary steps to push the further enforcement of the School Vaccination Order of the Board, so that all new scholars and those who have not heretofore fully complied with its provisions may be properly protected against smallpox before the advent of cold weather.

In accordance with this action of the Board, County Superintendents of Schools, school directors, trustees, and teachers are hereby reminded that the admission of any child to a public school in this State without presenting satisfactory evidence of proper and successful vaccination is prohibited.

After quoting an opinion of the Attorney-General which clearly defines the power of the Board to enforce vaccination and revaccination in the case of all school children in the State, the Secretary calls attention to the following facts concerning the operation of the School Vaccination Order, during the winter of 1881–82, and which are compiled from the Fifth Annual Report of the State Board. When the School Vaccination order went into effect, January 1, 1882, nearly sixty-nine per cent, or over four hundred and ninety thousand, of the enrolled scholars in Illinois were either entirely unprotected against smallpox by vaccination, or had again become susceptible through failure to revaccinate at the proper time. Within sixty days, that is by the 1st of March, 1882, there was less than six per cent of unprotected and susceptible remaining among those in attendance; and the frequency of smallpox and varioloid among public-school children had been lessened more than one third, while the mortality rate of cases was reduced from 16.5 per cent to 3.3 per cent. On the one hand, the number of cases was reduced, owing to the general vaccinal protection; and, on the other hand, the cases which did occur were milder and less fatal, because of the modifying effect of vaccination. The smallpox reports made to the Board from all parts of the State during the four years, 1880–1883, show that the deaths among *unvaccinated* school-children was at the rate of forty-eight in every one hundred attacked; while the deaths among *vaccinated* school-children were only in the proportion of *nine-tenths of one per cent* of those attacked. It is difficult to conceive of a stronger argument than these figures present for the necessity of a thorough enforcement of proper and suc-

cessful vaccination as a pre-requisite to admission to the public school-room.

MYXEDEMA AND ITS PATHOLOGY. — A paper on Myxedema and its Pathology, of which the following is an abstract, was communicated by Dr. W. B. Hadden, London, to the Section of Medicine of the International Congress (Med. Times): Myxedema is a disease characterized by a general swollen condition of the body. The appearance of the patient suggests ordinary dropsy, but the parts do not pit on pressure. The face is swollen and puffy, the lips and alæ nasi thickened, the eyelids edematous looking, and on each cheek there is a well-defined flush. The general expression is placid and inert—in a word, cretinoid. The skin every where is dry and harsh, perspiration and the secretion of the sebaceous glands are almost absent. The hands are broad, clumsy, and "spade-like." The hair is soft and scanty, and tends to fall out. The nails and teeth share in the general mal-nutrition. The thyroid gland wastes, although it is difficult often to determine this, in consequence of the swelling of the tissues of the neck. Soft masses are usually to be felt in the supra-clavicular regions. The temperature is almost constantly subnormal. The speech is slow, thick, monotonous, nasal. The tongue seems to be too large for the mouth. There is general muscular feebleness, the gait is slow and tottering, and all movements are retarded. There is marked mental lethargy. An indisposition to all bodily and mental activity is one of the most striking features of the disease. The urea excreted by the urine is much diminished, but with this exception there is no constant change. In the later stages albuminuria and true dropsy may supervene. Somnolence, insanity, impairments of memory, disorders of the special senses, and certain subjective sensations are frequently experienced. The tongue, uvula, soft palate, and larynx are generally swollen, and difficulty in deglutition is often observable. The appetite is bad, and defecation usually difficult in consequence, probably, of swelling of the mucous membrane of the rectum. The disease usually attacks adult women, but it occasionally commences before twenty, possibly sometimes in childhood. It occurs among rich and poor. Climate and race are probably without influence. Syphilis and excess of alcohol have no share in its causation, but serious mental disturbance and exhaustion from excessive child-bearing are occasional antecedents. As regards family history, phthisis is remarkably frequent, acute rheumatism and insanity occasional, and in at least one case myxedema has been observed in the collaterals. As to morbid anatomy, the constant factor is a diminution in size of the thyroid gland. According to Dr. Ord there is solid edema of the connective tissue throughout the body, and a great increase in the amount of mucin—hence the name myxedema (*mucous edema*). The author believes that the disease is probably dependent on changes in the sympathetic nervous system, and he thinks it not unlikely that the thyroid is in some relation with the peripheral sympathetic nerve-fibers. This view has recently been borne out by *post-mortem* evidence. Improvement has occasionally been effected by drugs, especially jaborandi.

DISEASE BY INOCULATION.—In most of the granulomatous disorders we may have not merely a diffusion of the disease throughout the individual organism, but also a transference of it from one individual to another—the affection is inoculable. If one person be inoculated with the inflammatory products derived from another, he acquires a disease whose course is exactly similar to that of the original one, and which yields identical inflammatory products. This latter character of infectiveness is that by which it is most readily recognized.

To this group of infective granulomata belong the neoplastic formations found in tuberculosis, syphilis, leprosy, lupus, glanders and actinomycosis. All these affections are due to the invasion of the body by a virus or poison derived from the outer world, or from the body of another individual. This virus may probably be produced by vegetable parasites. In leprosy (Hansen, Neisser), tuberculosis (Koch), and in syphilis (Klebs), bacteria have been found, and in actinomycosis, a special fungus. These are declared to be the originating causes of the respective diseases. Our ideas as to the nature and character of these affections are as yet mainly based upon their clinical course, but we have also derived something from inoculation experiments. Tuberculosis and syphilis are thus known to be communicable from one person to another, tuberculosis is also communicable from man to the lower animals.

Inoculation with sputa containing bacilli

of tubercle gives rise to tuberculosis, which is developed more rapidly when the bacilli are abundant. The inoculated bacillus multiplies in the organism and invades the lymphatic system, liver, spleen, and serous membranes; by its presence it sets up a chronic inflammatory process, with the formation of products which become casefied and subsequently soften, producing gradual destruction of the organs. *The bacillus is found in the center of the tubercles in their earliest stage of formation, and hence is the cause, and not the effect, of the morbid process.* The lymphatic vessels, ameboid cells and the blood-current are the means by which these micro-organisms are transported from one organ to another and diffused throughout the body.—*Dr. G. H. Philipson, Bradshawe Lecture; Medical Times.*

SCARLET FEVER IN PREGNANCY.—Scarlet fever may attack the fetus in utero.

The large proportion of children born with scarlet fever recover.

Scarlet fever of the newly-born child has like manifestations as when it occurs later in life.

Scarlet fever may attack the woman during pregnancy, and also immediately after child-birth.

Scarlet fever is exceedingly fatal to the woman during pregnancy and during parturition.

Scarlet fever rarely, if ever, affects the parturient woman if she has had a previous attack.

Scarlet fever causes death in the parturient woman by coma, exhaustion, or by convulsions.

Scarlet fever, being a self-limited disease, is best treated by relieving dangerous symptoms, and in accordance with the rules of hygiene.

Scarlet fever only exceptionally occurs during the ages that women bear children; therefore, the proportion of those liable to contract the disease during pregnancy and child-birth must necessarily be small.

Scarlet fever and septicemia are distinct diseases, being unlike in many respects.—*Dr. Charles A. Leale, in the Phila. Medical News.*

TREATMENT OF THE RATTLESNAKE BITE. If called immediately after the accident—First, cord the limb above the wound. Second, enlarge the wound and cup. Third, Give the patient from three to five grains of carb. ammonium and the same quantity of quinine every hour, and continue until you get a quinine pulse; then leave off the quinine and continue the ammonia every two or three hours. Fourth, give four ounces of pure olive oil every six hours till it operates. Fifth, inject, hypodermically, from three to five drops of tinct. iodine every three or four hours. Sixth, give the patient plenty of bi-carb. sodium in all the water he drinks. Seventh, after enlarging the wound, whether you cup or not, keep a cloth constantly to the wound, saturated with a strong solution of permanganate of potassium. Eighth, avoid the whisky treatment as you would another serpent, and the patient will recover in due time.—*Dr. Dumas, Georgia Eclectic Medical Journal.*

A GOOD DIURETIC.—The following combination, recommended by Dr. Fothergill, will be found a useful diuretic:

R Pot. citrat	℥iiss;
Spt. juniper co.	℥j;
Tr. digitalis	℥iiss;
Inf. buchu, ad	℥viij.

M. Sig. One to two teaspoonfuls three or four times a day.—*Canada Lancet.*

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from September 7, 1884, to September 13, 1884.

Greenleaf, Charles R., Major and Surgeon, to conduct a detachment of recruits to the Department of Columbia, and upon completion of this duty regain his station, Columbus Barracks, Ohio. (S. O. 210, A. G. O., Sept. 6, 1884.) *Gorgas, W. C.*, First Lieutenant and Assistant Surgeon, assigned to duty at Ft. Randall, D. T. (S. O. 98, Department of Dakota, Sept. 5, 1884.) *Egan, P. R.*, First Lieutenant and Assistant Surgeon, when relieved by Assistant Surgeon Fisher, to report at Fort Lowell, A. T., for duty as post surgeon. (S. O. 82, Department of Arizona, Sept. 2, 1884.) *Macauley, C. N. B.*, First Lieutenant and Assistant Surgeon, assigned to duty at Fort Sisseton, D. T. (S. O. 99, Department of Dakota, Sept. 6, 1884.) *Fisher, W. W. R.*, First Lieutenant and Assistant Surgeon, assigned to duty at Fort Apache, A. T., relieving Assistant Surgeon Egan. (S. O. 32, C.S., Department of Arizona.) *Ewing, Chas. B.*, First Lieutenant and Assistant Surgeon, assigned to duty, as post surgeon, at Fort Stanton, N. Mexico. (S. O. 177, Department of the Missouri, Sept. 6, 1884.) *McCaw, W. D.*, First Lieutenant and Assistant Surgeon (recently appointed), to report in person to the Commanding General Department of the Missouri, for assignment to duty. (S. O. 209, A. G. O., Sept 5, 1884.).